

ABSTRACT

Background & Objectives:

The purpose of this study was to establish cephalometric norms for North and South Tamilnadu population.

Materials and Methods:

100 individuals, 50 from North and 50 from South Tamilnadu with age range of 18-25 years, showing class I skeletal base and ANB 2° were selected. The individuals were named as Group 1 (North Tamilnadu origin) and Group 2 (South Tamilnadu origin). Lateral cephalograms were taken and traced. Skeletal parameters like SNA (°), SNB (°), MP/SN (°), Co – A (mm), Co – Gn (mm), ANS – Me (mm), PFH: AFH, Y – AXIS, FACIAL AXIS, Dental Parameters like U1/L1 (°), U1/SN (°), U1/NA (°), U1-NA (mm), L1-NB (mm), L1/NB (°), L1/MP (°) and Soft tissue Parameters like S-LINE, H-ANGLE, E-LINE, Z-ANGLE are analyzed in Lateral cephalogram and norms were established for Group 1 and Group 2 and gender comparison was done within the groups.

RESULTS:

Norms were established for Group 1 and Group 2 and on comparison two parameters UI/NA (mm) and Z-angle were statistically significant with the p value of 0.033 and 0.012 respectively. Rest all parameters were statistically non significant. On comparing Group 1 male and female, parameters which were statistically significant (p value < 0.05) are: Facial axis (0.012), Co-A (0.000), Co-Gn (0.000), ANS/Me (0.001),

UI/LI (0.021), LI/MP (0.016), LI/MB (0.021), S-line UL (0.012), S-line LL (0.020). on comparing Group 2 male and female, parameters which were statistically significant (p value < 0.05) are: Co- A (0.002), Co-Gn (0.003), ANS/Me (0.000), LI/MP (0.004), LI/NB (0.027).

CONCLUSION:

South Tamilnadu individuals showed more prognathic maxilla than North. In North and South Tamilnadu individuals, increased effective maxillary length and mandibular length. Both North and South Tamilnadu showed horizontal growth pattern, shorter lower anterior facial height, proclined and forwardly placed upper and lower incisor. Males have retrusive lip than females in both North and South Tamilnadu population.

Keywords: Cephalometric norms, Lateral cephalogram, Ethnic, North Tamilnadu, South Tamilnadu.